

## Latent Print Examiner Black Box 2022 (LatentBB22)

### Eligibility questions, Background Questionnaire, and Post-Test Questionnaire

#### 1 Eligibility questions

*Ed note: The eligibility questions are asked during registration: if disqualified they do not get to the survey.*

*Grayed text indicates process flow and is not shown to participants.*

1. Are you a latent print examiner who has conducted independent casework (latent print examination, technical review, or verification) within the last 2 years?
  - 1.a Yes (I **currently** conduct independent casework on a regular basis)
  - 1.b Yes (I do not currently conduct independent casework, but I have **within the last 2 years**)
  - 1.c No (It has been **more than 2 years** since I have conducted independent casework) [DISQUALIFYING]
  - 1.d No (I am a **trainee** and do not conduct independent casework) [DISQUALIFYING]
  - 1.e No (**not a latent print examiner**) [DISQUALIFYING]
2. *[if 1.1.a or 1.1.b]* Has the independent casework (latent print examination, technical review, or verification) that you have conducted within the last 2 years been as an employee or contractor for a U.S. federal, state, local, tribal, or territorial agency? (if more than one applies, select the most recent)
  - 2.a Yes: U.S. Federal government
  - 2.b Yes: U.S. State government
  - 2.c Yes: U.S. City/County government
  - 2.d Yes: U.S. Tribal government
  - 2.e Yes: U.S. Territorial government
  - 2.f No [DISQUALIFYING]

#### 2 Background Questionnaire

##### *Experience*

1. Number of years employed as a latent examiner (after completion of training)
  - 1.a None or still a trainee [DISQUALIFYING]
  - 1.b Less than 1 year
  - 1.c 1 to 4 years
  - 1.d 5 to 9
  - 1.e 10 to 19
  - 1.f 20 to 29
  - 1.g 30 or more
2. What percentage of time have you spent over the last two years doing latent comparisons? (including technical review and verifications)
  - 2.a N/A: I have not performed comparisons in the last two years [DISQUALIFYING]
  - 2.b Less than 10%

- 2.c 10-25%
  - 2.d 25-50%
  - 2.e 50-75%
  - 2.f 75-100%
3. Type of latent training received
- 3.a None
  - 3.b Informal training (on the job, apprenticeship)
  - 3.c Limited formal training (courses, workshops)
  - 3.d Formal program of instruction for less than 6 months
  - 3.e Formal program of instruction for at least 6 months, but less than 1 year
  - 3.f Formal program of instruction for 1 or more years
4. Have you been certified and/or qualified as a latent print examiner? (Check all that apply)
- 4.a International Association for Identification (IAI) Certified Latent Print Examiner (CLPE)
  - 4.b Certified or qualified by a current or previous **accredited** employer
  - 4.c Certified or qualified by a current or previous **non-accredited** employer
  - 4.d National certification (non-US only)
  - 4.e I have never been certified or qualified
5. Have you taken a proficiency test?
- 5.a No: I have **never** taken a proficiency test
  - 5.b No: I have taken a proficiency test, but **not within the past 12 months**
  - 5.c Yes, I have taken a test **from an outside source** within the past 12 months (e.g., from CTS or another commercial provider)
  - 5.d Yes, I have taken an **internal (agency-developed) test** within the past 12 months
  - 5.e Yes, I have taken **both internal and external tests** within the past 12 months
6. How many times have you testified in court as a latent fingerprint expert? (including depositions and administrative hearings)?
- 6.a Never
  - 6.b 1-9
  - 6.c 10-19
  - 6.d 20+
7. Of the latent-to-exemplar casework you have performed over the last two years (including latent print examination, technical review, or verification), what proportion of the conclusions were based on a **single** exemplar print (e.g., based on one rolled exemplar without reference to the plain exemplar or additional sets of exemplar fingerprints)?
- 7.a N/A: I have not performed comparisons in the last two years
  - 7.b None (always refer to 2 or more exemplars)
  - 7.c 1-33%
  - 7.d 34-66%
  - 7.e 67-99%
  - 7.f All (never refer to 2 or more exemplars)
8. Of the latent-to-exemplar casework you have performed over the last two years (including latent print examination, technical review, or verification), what proportion do you perform on computer screens, as opposed to looking at physical evidence/paper cards?
- 8.a N/A: I have not performed comparisons in the last two years

- 8.b None (0% computer, all physical evidence/paper cards)
  - 8.c 1-33% on computer screen
  - 8.d 34-66% on computer screen
  - 8.e 67-99% on computer screen
  - 8.f All (100% on computer screen , no physical evidence/paper cards)
9. Are you aware of ever having made an erroneous identification/individualization (after training)? (check all that apply)
- 9.a No
  - 9.b Yes, on a ***proficiency test*** only
  - 9.c Yes, on casework as the ***initial examiner***; the error was detected during verification or as part of QA/review process
  - 9.d Yes, on casework as a ***verifier***; the error was detected as part of QA/review process
  - 9.e Yes, on casework; the error was detected ***after it was reported to contributor***
10. Are you aware of ever having made an erroneous exclusion (after training)? (check all that apply)
- 10.a No
  - 10.b Yes, on a ***proficiency test*** only
  - 10.c Yes, on casework as the ***initial examiner***; the error was detected during verification or as part of QA/review process
  - 10.d Yes, on casework as a ***verifier***; the error was detected as part of QA/review process
  - 10.e Yes, on casework; the error was detected ***after it was reported to contributor***

### Agency

11. Has your agency received accreditation in latent prints? (If multiple employers, respond for the agency you have worked for most recently)
- 11.a Yes (for example by ASCLD/LAB (American Society of Crime Laboratory Directors/Laboratory Accreditation Board) or FQS (Forensic Quality Services))
  - 11.b No
  - 11.c Don't know
12. Indicate all types of agencies or organizations for whom you have conducted latent print examination casework ***over the course of your career*** (select all that apply)
- 12.a U.S. Federal government
  - 12.b U.S. State government
  - 12.c U.S. City/County government
  - 12.d U.S. Tribal government
  - 12.e U.S. Territorial government
  - 12.f Private company/Independent consultant
  - 12.g Non-U.S. government

### Conclusions

13. Does your agency use likelihood ratios or other probability measures in reporting conclusions?
- 13.a Yes, we use likelihood ratios or other probability measures ***in addition to*** (or in support of) the conclusion scale
  - 13.b Yes, we use likelihood ratios or other probability measures ***instead of*** a conclusion scale
  - 13.c No

14. [if 13.a or 13.c] What conclusions do you currently use to report your comparison findings in casework? (If you use a variation of these, select "Other.")

- 14.a Individualization, Inconclusive, Exclusion (*SWGFAST Standards for Examining Friction Ridge Impressions and Resulting Conclusions, 2013*)
- 14.b Identification, Inconclusive, Exclusion
- 14.c Association, Inconclusive, Exclusion
- 14.d Source Identification, Inconclusive, Source Exclusion (*DOJ ULTR for the Forensic Latent Print Discipline, 2020*)
- 14.e Source Identification, Support For Same Source, Inconclusive/Lacking Support, Support For Different Source, Source Exclusion (*ASB/OSAC Draft Standard for Friction Ridge Examination, 2020*)
- 14.f Source Identification, Inconclusive with Similarities, Inconclusive/Equivalent Support, Inconclusive with Dissimilarities, Source Exclusion (*ASB Draft Standard 013, Standard for Friction Ridge Examination Conclusions, 2021*)
- 14.g Other (specify in next question)

15. [if 14.g] Which of the following conclusions do you currently use in casework? (select all that apply)

- 15.a Different source
- 15.b Elimination
- 15.c Exclusion
- 15.d Source Exclusion
- 15.e Strong support for different source
- 15.f Qualified exclusion
- 15.g Support For Different Source
- 15.h Inconclusive with Dissimilarities
- 15.i Unable to exclude
- 15.j Equivalent Support
- 15.k Inconclusive
- 15.l Inconclusive with Similarities
- 15.m Lacking Support
- 15.n Non-identification
- 15.o Qualified identification
- 15.p Support For Same Source
- 15.q Inclusion
- 15.r Strong support for same source
- 15.s Identification
- 15.t Individualization
- 15.u Same source
- 15.v Source Identification

16. If in analysis you determine that a latent is not suitable for identification but could potentially be used for exclusion, are you permitted to compare it to exemplars? (Given your agency's standard operating procedures)

- 16.a No (such a latent cannot be used for comparison)
- 16.b Yes (such a latent can be used for comparison)

17. Do the value/suitability decisions you make during analysis use 2 or 3 categories (given your agency's standard operating procedures)?

- 17.a 2 categories: Value, No value (or Suitable, Not suitable, etc.)
- 17.b 3 categories: Value for ID, Value for exclusion only, No value (or Value, Limited value, No value, etc.)

18. If the latent and exemplar are both of value, include a large potentially corresponding area, no other latent or exemplar images are available, and you already have all processing information related to the latent, are you permitted to make an inconclusive determination? (Given your agency's standard operating procedures)
- 18.a Inconclusive determinations are discouraged but possible in this case
  - 18.b Inconclusive determinations are freely accepted in this case
  - 18.c Inconclusive determinations are not permitted in this case

### AFIS

19. How much of your latent print casework over the two last years has involved AFIS? (conducting searches and comparing candidates)

- 19.a None *[skip remaining questions in this section]*
- 19.b 1-33% AFIS
- 19.c 34-66% AFIS
- 19.d 67-99% AFIS
- 19.e All AFIS

20. *[if 19. != 19.a]* How often do you search NGI (the FBI Next Generation Identification System)?

- 20.a Never
- 20.b Less than monthly
- 20.c Monthly
- 20.d Weekly
- 20.e Daily

21. *[if 19. != 19.a]* How often do you search a state AFIS? (or multistate regional AFIS)

- 21.a We do not have access to any state/regional AFIS
- 21.b Never
- 21.c Less than monthly
- 21.d Monthly
- 21.e Weekly
- 21.f Daily

22. *[if 19. != 19.a]* How often do you search a local AFIS?

- 22.a We do not have access to any local AFIS
- 22.b Never
- 22.c Less than monthly
- 22.d Monthly
- 22.e Weekly
- 22.f Daily

23. *[if 19. != 19.a and 19. != 19.e]* Do you have a different value threshold for AFIS searches than for non-AFIS casework, such as "AFIS quality" or "of value for AFIS"?

- 23.a No
- 23.b Yes, used informally
- 23.c Yes, formal designation in our agency's standard operating procedures

24. *[if 19. != 19.a]* Do you have a minimum number of minutiae required in a latent in order to conduct an AFIS search?

- 24.a No

- 24.b Yes, used informally
- 24.c Yes, formally specified in our agency's standard operating procedures

25. [if 24.b or 24.c] What is the minimum number of minutiae required in a latent in order to conduct an AFIS search?

- 25.a 2
- 25.b 3
- 25.c 4
- 25.d 5
- 25.e 6
- 25.f 7
- 25.g 8
- 25.h 9
- 25.i 10
- 25.j 11
- 25.k 12
- 25.l 13
- 25.m 14
- 25.n 15

26. [if 19. != 19.a] When you are comparing latent prints to exemplars and considering whether to make an ID conclusion, is your decision process affected based on whether the exemplar was the result of an AFIS search vs the result of non-AFIS investigation?

- 26.a Our agency has explicit policies on making ID conclusions for AFIS vs non-AFIS cases (e.g. higher decision threshold, stricter tolerances for differences in appearance, and/or feature weighting)
- 26.b Our agency recommends greater caution in making IDs for AFIS vs non-AFIS cases, but this is not explicitly specified
- 26.c Our agency policies do not address this, but I use greater caution in making IDs for AFIS vs non-AFIS cases
- 26.d My decision process for making IDs is the same regardless of whether the exemplar was AFIS vs non-AFIS

### Verification

*For the following questions, assume "verification" includes either blind verification or non-blind verification.*

27. Given your agency's standard operating procedures, how often are **ID** conclusions verified? (including identification, individualization, or source identification) (if not currently performing latent casework, respond for your most recent employer)

- 27.a ID conclusions are **always** verified
- 27.b ID conclusions are **sometimes** verified
- 27.c ID conclusions are **never** verified

28. [if 27.b] Select the circumstances in which **ID conclusions** are verified: (check all that apply)

- 28.a ID conclusions are verified if there is only one comparison in a case
- 28.b ID conclusions are verified if there are no other IDs in a case
- 28.c ID conclusions are generally verified, except in cases with multiple previous IDs to the same person
- 28.d A subset of ID conclusions are selected for verification

- 28.e ID conclusions on latents flagged as poor quality or comparisons flagged as complex are selected for verification
- 28.f Whether ID conclusions are verified is case dependent
29. Given your agency's standard operating procedures, how often are **Exclusion** conclusions verified? (if not currently performing latent casework, respond for your most recent employer)
- 29.a Exclusion conclusions are **always** verified
- 29.b Exclusion conclusions are **sometimes** verified
- 29.c Exclusion conclusions are **never** verified
30. [if 29.b] Select the circumstances in which **exclusion conclusions** are verified: (check all that apply)
- 30.a Exclusion conclusions are verified if there is only one comparison in a case
- 30.b Exclusion conclusions are verified if there are no other exclusions in a case
- 30.c A subset of exclusion conclusions are selected for verification
- 30.d Exclusion conclusions on latents flagged as poor quality or comparisons flagged as complex are selected for verification
- 30.e Whether exclusion conclusions are verified is case dependent
31. Given your agency's standard operating procedures, how often are **inconclusive determinations** verified? (if not currently performing latent casework, respond for your most recent employer)
- 31.a Inconclusive determinations are **always** verified
- 31.b Inconclusive determinations are **sometimes** verified
- 31.c Inconclusive determinations are **never** verified
32. [if 31.b] Select the circumstances in which **inconclusive determinations** are verified: (check all that apply)
- 32.a Inconclusive determinations are verified if there is only one comparison in a case
- 32.b Inconclusive determinations are verified if there are no other inconclusives in a case
- 32.c A subset of inconclusive determinations are selected for verification
- 32.d Inconclusive determinations on latents flagged as poor quality or comparisons flagged as complex are selected for verification
- 32.e Whether inconclusive determinations are verified is case dependent
33. Given your agency's standard operating procedures, how often are **no value determinations** verified? (if not currently performing latent casework, respond for your most recent employer)
- 33.a No value determinations are **always** verified
- 33.b No value determinations are **sometimes** verified
- 33.c No value determinations are **never** verified
34. [if 33.b] Select the circumstances in which no value determinations are verified: (check all that apply)
- 34.a No value determinations are verified if there is only one comparison in a case
- 34.b No value determinations are verified if there are no other exclusions in a case
- 34.c A subset of no value determinations are selected for verification
- 34.d No value determinations on latents flagged as poor quality or comparisons flagged as complex are selected for verification
- 34.e Whether no value determinations are verified is case dependent
35. Given your agency's standard operating procedures, when does your agency conduct **BLIND verification**? (In blind verification, the reviewer is not aware of the initial examiner's conclusion.)
- 35.a Never

- 35.b All single conclusions in a case are selected for blind verification (for example, if only one comparison resulted in an exclusion)
- 35.c A percentage of comparisons are randomly selected for blind verification
- 35.d If the verifying examiner reaches a different conclusion than the initial examiner
- 35.e All verifications are blind

### 3 Post-Test Questionnaire

1. Overall, was the quality of the ***exemplars*** in this study representative of the exemplars you see in casework?
  - 1.a Study exemplars were higher quality than casework
  - 1.b Study exemplars were similar to casework
  - 1.c Study exemplars were lower quality than casework
2. Overall, was the quality of the ***latents*** in this study representative of the latents you see in casework?
  - 2.a Study latents were higher quality than casework
  - 2.b Study latents were similar to casework
  - 2.c Study latents were lower quality than casework
3. Overall, were the ***processing methods and substrates*** of the latents in this study consistent with the latents you see in casework?
  - 3.a Yes: the processing methods and substrates are typical of what is encountered in casework
  - 3.b Almost all: almost all of the processing methods and substrates are typical of casework, but a few are unusual or encountered infrequently in casework
  - 3.c Somewhat: some of the processing methods and substrates are typical of casework, but some are unusual or encountered infrequently in casework
  - 3.d No: the processing methods and substrates of the latents in the study are notably different from those encountered in casework
4. Overall, how did the ***difficulty*** of the comparisons you performed in this study correspond to the comparisons you've performed in operational casework?
  - 4.a Overall, the comparisons in this study were ***much easier*** than operational casework.
  - 4.b Overall, the comparisons in this study were ***easier*** than operational casework.
  - 4.c Overall, the comparisons in this study were ***typical*** (in terms of difficulty) to operational casework.
  - 4.d Overall, the comparisons in this study were ***harder*** than operational casework.
  - 4.e Overall, the comparisons in this study were ***much harder*** than operational casework.
5. Please provide any additional comments you have about the study overall. (Please limit your responses to 75 words or less.)